



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,513	01/02/2004	John Nash	0119/0029	8687
21395	7590	09/20/2007		
LOUIS WOO LAW OFFICE OF LOUIS WOO 717 NORTH FAYETTE STREET ALEXANDRIA, VA 22314			EXAMINER ALI, SHUMAYA B	
			ART UNIT 3771	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/749,513

Applicant(s)

NASH ET AL.

Examiner

Shumaya B. Ali

Art Unit

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 11, 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3771

## DETAILED ACTION

### *Status of Claims*

Examiner grants this office action in response to the amendment filed on 5/16/07.

Currently, claims 1-9, and 10-18 are pending in the instant application and claims 10,19, and 20 have been cancelled.

### *Claim Objections*

**Claim 15** is objected to because of the following informalities: in line 1, “the opposite ends” lacks antecedent basis.

**Claim 17** is objected to because of the following informalities: claim 17, in line 2, please consider replacing “...reenforcement...” with --reinforcement--.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Fecteau US**

**6,536,435 B1**

As to **claim 18**, Fecteau teaches a method of making a face mask comprising the steps of moulding a first frame (**fig.2, 14**) component having a plurality of radially extending arms

Art Unit: 3771

(48,50) in a mould from a relatively high temperature plastics material (**14 is rigid plastic material, see claim 14**) and subsequently moulding a second component (**22**) from a relatively low temperature plastics (**col.6, lines 8-10**) material directly on said first frame component while said first frame component is in said mould (**col.3, lines 34-37**).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-4,6-9, and 13, and 16 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fecteau US 6,536,435 B1**

As to claim 1, Fecteau discloses a face mask (**fig.2**) of a plastics material (**col.6, lines 8-10**) comprising: a relatively soft canopy member having a peripheral sealing edge (**22**) providing a seal (**a seal is created by wearing mask over the mouth and nose followed by strapping around the head to tightly hold the mask in place, see also col.2, lines 20-23**) with the skin around the nose and mouth of a patient; a relatively rigid reinforcement member (**see labeled fig. 2 attached below. In order to support filter cartridges 76 and 78, the reinforcement member has to be relatively rigid**) in the form of a frame having a plurality of radially-extending arms (**see labeled fig.2 attached below**), and a gas port (**78**) by which gas can enter the mask. Fecteau however lacks explicit teachings of said reinforcement member being molded integrally with said canopy member as another shot in the dual-shot molding process; said canopy member being molded as one shot in a dual-shot molding process. However, said limitation is considered a product by process limitation. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product is in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) In this case, Fecteau's reinforcement member and mask are considered integral structures (see fig.2), Applicant's intention is also to yield a mask and its component that are integral using a dual shot molding process. Fecteau further discloses other parts of the mask assembly, for example, structure 14 can be integrally molded with the mask 22 into a single element by dual shot molding (**see col.3,**

**lines 34-37)** Thus, it would have been obvious that Fecteau could have bonded the mask and reinforcement member using a dual shot molding process.

**As to claim 2**, Fecteau discloses wherein said peripheral sealing edge of said canopy member is tapered to a reduced thickness and an increased flexibility at its edge (**fig, 2 depicts that the portion of the mask that accommodates yoke 14 is thicker than the edges of the mask. Thus the edges are considered more flexible than the portion that accommodates yoke 14).**

**As to claim 3**, Fecteau discloses wherein said gas port is provided on said reinforcement member (**see fig.2).**

**As to claim 4**, Fecteau discloses wherein said gas port has a gas connector (**30**) projecting therefrom for connection to a gas supply tube, and wherein said port is located in line with the mouth of the patient and said connector is angled such that it projects down when the mask is applied to the patient's face in an upright position (**fig.1).**

**As to claim 6**, Fecteau discloses wherein said valve is provided on said reinforcement member (**see fig.2).**

**As to claim 7**, Fecteau discloses the mask including a selectively closable vent (**76**) that can be opened to allow flow of gas out of the mask.

**As to claim 8**, Fecteau discloses wherein said vent includes a cap member (**28 is considered cap since it covers an aperture/vent 76**) movable between two discrete positions where said vent is open or closed respectively.

**As to claim 9**, Fecteau discloses wherein said vent is provided on said reinforcement member (**see fig.2).**

As to **claim 13**, Fecteau discloses wherein said frame includes three arms supporting respectively a gas port a valve to allow gas to enter the mask and a vent that can be opened to allow gas to flow out of the mask (**see fig.2**).

As to **claim 16**, Fecteau discloses a face mask (**fig.1 and 2**) assembly including a harness (**46 and 56**) and a mask (**22**), wherein said mask is of a plastics (**col.6, lines 8-10**) material and comprises: a relatively soft canopy member (**22**) having a peripheral sealing edge (**a seal is created by placing the canopy over the face/nose followed by tightening the straps 34**) providing a seal (**a seal is created by wearing mask over the mouth and nose followed by strapping around the heard to tightly hold the mask in place, see also col.2, lines 20-23**) with the skin around the nose and mouth of a patient, a relatively rigid reinforcement member (**see labeled fig. 2 attached below. In order to support filter cartridges 76 and 78, the reinforcement member has to be relatively rigid**) of frame shaped with a plurality of radially extending arms (**see labeled fig.2, attachment below**), a gas port (**78**) provided on said reinforcement member by which gas can enter the mask, and wherein said harness is arranged to extend around the head of the patient (**56 extends around the head of a patient**) and is attached with said reinforcement member (**harness is considered attached to the reinforcement member since the structure 14 that becomes the harness attachment point is attached to the reinforcement member via 66 (see fig.2)**). Fecteau however lacks explicit teachings of said reinforcement member being molded integrally with said canopy member as another shot in the dual-shot molding process; said canopy member being molded as one shot in a dual-shot molding process. However, said limitation is considered a product by process limitation. Even though product-by-process claims are limited by and defined by the process, determination of

Art Unit: 3771

patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product is in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) In this case, Fecteau's reinforcement member and mask are considered integral structures (see fig.2), Applicant's intention is also to yield a mask and its component that are integral using a dual shot molding process. Fecteau further discloses other parts of the mask assembly, for example, structure 14 can be integrally molded with the mask 22 into a single element by dual shot molding (see col.3, lines 34-37) Thus, it would have been obvious that Fecteau could have bonded the mask and reinforcement member using a dual shot molding process.

**Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fecteau US 6,536,435 B1 in view of Tayebi US 4,856,508**

As to claims 5 and 17, Fecteau discloses a valve (fig.2, 71) separate from said gas port, however, lacks wherein said valve is arranged to allow air to flow into the mask when there is an inadequate supply at said gas port. However, Tayebi teaches a facemask having a valve that permits wearer of the mask to inhale thorough the filter liner (of the mask) but on exhalation valve opens to vent exhaled air as well (see col.9, lines 13-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the valve of Fecteau in order to provide a valve that can both serve as inhalation and exhalation valve for the purposes of permitting wearer to inhale, but also exhale by opening the valve in order to vent exhaled air as taught by Tayebi.



**Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fecteau US 6,536,435 B1 in view of Scarberry et al. US 5,655,527.**

As to **claim 14**, Fecteau discloses wherein the mask including a harness (**fig.1, 46**) managed to extend around the head of the patient (**see fig.1**). Fecteau however lacks the harness is attached at opposite ends with said reinforcement member. However, Scarberry teaches a harness (**fig.1, 24 with 26 and 28**) attached at opposite ends (**via 74**) with said reinforcement member (**fig.1, 18**). The difference between Fecteau and Scarberry is the harness attachment point. Fecteau and Scarberry teach all claimed elements. Therefore, one of ordinary skill in the art would be motivated to modify Fecteau in order to change the harness attachment point because it is known in the art as taught by Scarberry.

**Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fecteau US 6,536,435 B1, Scarberry et al. US 5,655,527 and in view of Malis et al. US 5,465,712.**

As to **claim 15**, Scarberry teaches the harness having a free end (**fig.1, end of 26 attaching 74**) extending rearward and the free end is adjustably attachable with a part (**the end is adjustable by sliding though 76**) of said harness. Scarberry however lacks the opposite ends of the harness are triangular shape. However, Malis teaches harness with triangular shaped free ends (**see fig.1, free ends of 16**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scarberry in order to provide triangular free ends because it is known in the art as taught by Malis.

***Allowable Subject Matter***

Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to claim 1-9, and 11-18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-W-F 8:30am-5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

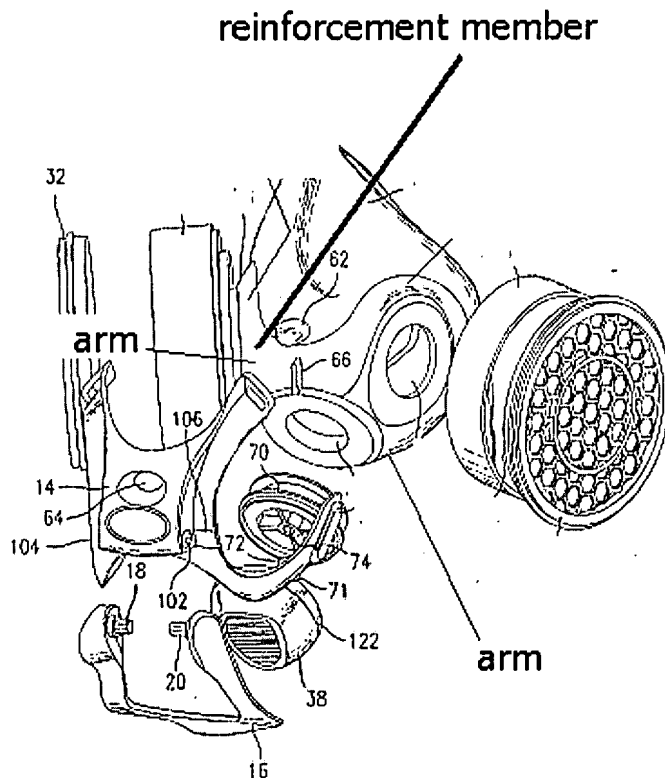
Art Unit: 3771

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shumaya B. Ali  
Examiner  
Art Unit 3771

  
JUSTINE R. YU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

9/17/07



Prior Art  
US 6,536,435 B1

FIG. 2